Current Research and Practice in Teaching Vocabulary

Alan Hunt and David Beglar

INTRODUCTION

The purpose of this article is to present a systematic framework for vocabulary development by combining three approaches to vocabulary instruction and learning (modified from Coady, 1997a; Hulstijn, Hollander, & Greidanus, 1996). These three approaches – incidental learning, explicit instruction, and independent strategy development – are presented in this article as seven teaching principles. The incidental learning of vocabulary requires that teachers provide opportunities for extensive reading and listening. Explicit instruction involves diagnosing the words learners need to know, presenting words for the first time, elaborating word knowledge, and developing fluency with known words. Finally, independent strategy development involves practicing guessing from context and training learners to use dictionaries.

Although all of these approaches and principles have a role to play in vocabulary instruction, the learners' proficiency level and learning situation should be considered when deciding the relative emphasis to be placed on each approach. In general, emphasizing explicit instruction is probably best for beginning and intermediate students who have limited vocabularies. On the other hand, extensive reading and listening might receive more attention for more proficient intermediate and advanced students. Also, because of its immediate benefits, dictionary training should begin early in the curriculum.

Before proceeding, it is necessary to clarify the definition of a word. In this article, *a word* (also called a base word or a word family) is defined as including the base form (e.g., *make*) and its inflections and derivatives (e.g., *makes*, *made*, *making*, *maker*, and *makers*). Since the meanings of these different forms of the word are closely related, it is assumed that little extra effort is needed to learn them (Read, 1988). While this may be true, a study of Japanese students showed that they did not know many inflections and

derivative suffixes for English verbs (Schmitt & Meara, 1977). Thus, these forms should be taught.

Although this definition of *a word* is convenient and commonly used in vocabulary research, it should be remembered that vocabulary learning is more than the study of individual words. Nattinger and DeCarrico (1992) have observed that a significant amount of the English language is made up of lexical phrases, which range from phrasal verbs (two or three words) to longer institutionalized expressions (Lewis, 1993, 1997). Because lexical phrases can often be learned as single units, the authors believe that the following principles apply to them as well as to individual words.

INCIDENTAL LEARNING

PRINCIPLE 1: PROVIDE OPPORTUNITIES FOR THE INCIDENTAL LEARNING OF VOCABULARY

In the long run, most words in both first and second languages are probably learned incidentally, through extensive reading and listening (Nagy, Herman, & Anderson, 1985). Several studies have confirmed that incidental L2 vocabulary learning through reading does occur (Chun & Plass, 1996; Day, Omura, & Hiramatsu, 1991; Hulstijn, Hollander, & Greidanus, 1996; Knight, 1994; Zimmerman, 1997). Although most research concentrates on reading, extensive listening can also increase vocabulary learning (Elley, 1989). Nagy, Herman, and Anderson (1985) concluded that (for native speakers of English) learning vocabulary from context is a gradual process, estimating that, given a single exposure to an unfamiliar word, there was about a 10% chance of learning its meaning from context. Likewise, L2 learners can be expected to require many exposures to a word in context before understanding its meaning.

The incidental learning of vocabulary through extensive reading can benefit language curricula and learners at all levels (Woodinsky & Nation, 1988). According to Coady (1997b), the role of graded (i.e., simplified) readers is to build up the students' vocabulary and structures until they can graduate to more authentic materials. Low-proficiency learners can benefit from graded readers because they will be repeatedly exposed to high-frequency vocabulary. Many students may never have done extensive reading for pleasure, so it may be initially useful to devote some class time to Sustained Silent Reading (SSR) (Pilgreen & Krashen, 1993). Once students develop the ability to read in a sustained fashion, then most of the reading should be done outside of class.

EXPLICIT INSTRUCTION

PRINCIPLE 2: DIAGNOSE WHICH OF THE 3,000 MOST COMMON WORDS LEARNERS NEED TO STUDY

Knowing approximately 3,000 high-frequency and general academic words is significant because this amount covers a high percentage of the words on an average page. The 2,000 high-frequency words in West's (1953) *General Service List* (GSL) cover 87% of an average nonacademic text (Nation, 1990) and 80% of an average academic text (P. Nation, personal communication, September 18, 1997). The 800 general academic words from Xue and Nation's (1984) "*University Word List*" account for about 8% of an academic text. For second language learners entering university, Laufer (1992) found that knowing a minimum of about 3,000 words was required for effective reading at the university level, whereas

knowing 5,000 words indicated likely academic success. One way to estimate vocabulary size is to use Nation's (1990) Vocabulary Levels Test or a checklist test which requires learners to mark the words on a list that they believe they know (for more information on checklist tests, see Read, 1988; Meara, 1992, 1996).

PRINCIPLE 3: PROVIDE OPPORTUNITIES FOR THE INTENTIONAL LEARNING OF VOCABULARY

The incidental learning of vocabulary may eventually account for a majority of a advanced learners' vocabulary; however, intentional learning through instruction also significantly contributes to vocabulary development (Nation, 1990; Paribakht & Wesche, 1996; Zimmerman, 1997). Explicit instruction is essential for beginning students whose lack of vocabulary limits their reading ability. Coady (1997b) calls this the beginner's paradox. He wonders how beginners can "learn enough words to learn vocabulary through extensive reading when they do not know enough words to read well" (p. 229). His solution is to have students supplement their extensive reading with study of the 3,000 most frequent words until the words' form and meaning become automatically recognized (i.e., "sight vocabulary"). The first stage in teaching these 3,000 words commonly begins with word pairs in which an L2 word is matched with an L1 translation.

Translation has a necessary and useful role in L2 learning, but it can hinder learners' progress if it is used to the exclusion of L2-based techniques. Prince (1996) found that both "advanced" and "weaker" learners could recall more newly learned words using L1 translations than using L2 context. However, "weaker" learners were less able to transfer knowledge learned from translation into an L2 context. Prince claims that weaker learners require more time when using an L2 context as they have less developed L2 networks and are slower to use syntactic information. To discourage the learners from overrelying on translation, he advises that teachers talk with them about their expectations of language learning and "the pitfalls of low-effort strategies like translation" (p. 489). Furthermore, translation needs to be followed up with other L2-based exercises and learning strategies (see Principles 4 through 7).

Vocabulary lists can be an effective way to quickly learn word-pair translations (Nation, 1990). However, it is more effective to use vocabulary cards because learners can control the order in which they study the words (Atkinson, 1972). Also, additional information can easily be added to the cards. When teaching unfamiliar vocabulary, teachers need to consider the following:

1. Learners need to do more than just see the form (Channell, 1988). They need to hear the pronunciation and practice saying the word aloud as well (Ellis & Beaton, 1993; Fay & Cutler, 1977; Siebert, 1927). The syllable structure and stress pattern of the word are important because they are two ways in which words are stored in memory (Fay & Cutler, 1977).

2. Start by learning semantically unrelated words. Also avoid learning words with similar forms (Nation, 1990) and closely related meanings (Higa, 1963; Tinkham, 1993) at the same time. For example, because *affect* and *effect* have similar forms, simultaneously studying them is likely to cause confusion. Also, bilingual vocabulary books often simply list words in alphabetical order, increasing the chances of confusing words that start with the same syllable. Likewise, words with similar, opposite, or closely associated (e.g., types of fruit, family members) meanings may interfere with one another if they are studied at the same time.

3. It is more effective to study words regularly over several short sessions than to study them for one or two longer sessions. As most forgetting occurs immediately after

initial exposure to the word (Pimsleur, 1967), repetition and review should take place almost immediately after studying a word for the first time.

4. Study five to seven words at a time, dividing larger numbers of words into smaller groups. As learners review these five to seven cards, they will more quickly get repeated exposure to the words than when larger groups (twenty to thirty) are studied.

5. Use activities such as the keyword technique to promote deeper mental processing and better retention (Craik & Lockhart, 1972). Associating a visual image with a word helps learners remember the word.

6. A wide variety of L2 information can be added to the cards for further elaboration. Newly met words can be consciously associated with other L2 words that the learner already knows (Prince, 1996), and this word can be added to the card. Sentence examples, parts of speech, definitions, and keyword images can also be added (see Schmitt & Schmitt, 1995).

PRINCIPLE 4: PROVIDE OPPORTUNITIES FOR ELABORATING WORD KNOWLEDGE

Prince (1996) states that simply knowing translations for L2 words does not "guarantee that they will be successfully accessed for use in an L2 context" (p. 488), because knowing a word means knowing more than just its translated meaning or its L2 synonyms. Drawing upon Richards's (1976) list, Nation (1994) identifies various aspects of word knowledge such as knowing related grammatical patterns, affixes, common lexical sets, typical associations, how to use the word receptively and productively, and so on. Receptive knowledge means being able to recognize one of the aspects of knowledge through reading and listening, and productive knowledge means being able to use it in speaking and writing. Teachers should be selective when deciding which words deserve deeper receptive and/or productive practice, as well as which types of knowledge will be most useful for their students. Many of the two thousand high-frequency words from the GSL or other lists would be good candidates for exercises that elaborate upon both receptive and productive knowledge.

Elaboration involves expanding the connections between what the learners already know and new information. One way to do this is to choose L2 words from the surrounding context and to explain their connections to the recently learned word (Prince, 1996). In addition to presenting this new information, teachers should create opportunities to meet these useful, recently learned words in new contexts that provide new collocations and associations (Nation, 1994). Exercises that can deepen students' knowledge of words include the following: sorting lists of words and deciding on the categories; making semantic maps with lists either provided by the teacher or generated by the learners; generating derivatives, inflections, synonyms, and antonyms of a word; making trees that show the relationships between superordinates, coordinates, and specific examples; identifying or generating associated words; combining phrases from several columns; matching parts of collocations using two columns; completing collocations as a cloze activity; and playing collocation crossword puzzles or bingo (see Lewis, 1993; McCarthy & O'Dell, 1994; Nation, 1994; Redman & Ellis, 1990).

PRINCIPLE 5: PROVIDE OPPORTUNITIES FOR DEVELOPING FLUENCY WITH KNOWN VOCABULARY

Fluency-building activities recycle already known words in familiar grammatical and organizational patterns so that students can focus on recognizing or using words without hesitation. As Nation (1994) points out, developing fluency "overlaps most of all with

developing the skills of listening, speaking, reading, and writing" (p. 208), so giving learners many opportunities to practice these skills is essential.

Fluency partly depends on developing sight vocabulary through extensive reading and studying high-frequency vocabulary. Fluency exercises include timed and paced readings. In timed readings, learners may try to increase their speed by sliding a 3×5 card or a piece of paper down the page to increase their speed while attempting to comprehend about 80% of a passage. Also, learners need to be given practice in looking at groups of words rather than each individual word when reading. Teachers can ask learners to practice timed reading on passages that have already been read. In paced readings, the teacher determines the time and pushes the learners to read faster. One type of paced reading is the "reading sprint" in which learners read their pleasure-reading book for 5 minutes and count the number of pages they have read. Then they try to read the same number of pages while the time they have to read decreases from 5 minutes to 4 to 3 to 2 minutes for each sprint. Finally, they read for five minutes again at a relaxed pace and count the number of pages they have finished (Mikulecky & Jeffries, 1996).

INDEPENDENT STRATEGY DEVELOPMENT

PRINCIPLE 6: EXPERIMENT WITH GUESSING FROM CONTEXT

Guessing from context is a complex and often difficult strategy to carry out successfully. To guess successfully from context, learners need to know about 19 out of every 20 words (95%) of a text, which requires knowing the 3,000 most common words (Liu & Nation, 1985; Nation, 1990). Even if one knows these words, however, Kelly (1990) concludes that "unless the context is very constrained, which is a relatively rare occurrence, or unless there is a relationship with a known word identifiable on the basis of form and supported by context, there is little chance of guessing the correct meaning" (p. 203). He also asserts that, because guessing from context fails to direct attention to word form and meaning, relatively little learning occurs.

Although this strategy often may not result in gaining a full understanding of word meaning and form, guessing from context may still contribute to vocabulary learning. Just what is and is not learned will partly depend on text difficulty as well as the learners' level. More proficient learners using texts that are not overly difficult can be expected to use this strategy more effectively than low proficiency learners. It should be remembered that learning vocabulary also includes learning about collocations, associations, and related grammatical patterns as well as meaning. Therefore, if regularly practiced, this strategy may contribute to deeper word knowledge for advanced learners as long as they pay attention to the word and its context.

However, given the continuing debate about the effectiveness of guessing from context, teachers and learners should experiment with this strategy and compare it to dictionary training. Guessing from context is initially time-consuming and is more likely to work for more proficient learners. A procedure for guessing from context begins with deciding whether the word is important enough (e.g., is part of an important idea and/or is repeated often) to warrant going through the subsequent steps. This decision is itself a skill that requires practice and experience. Teachers can assist learners by marking words which learners should try to infer before using other sources, as well as by providing glosses (Hulstijn, Hollander, & Greidanus, 1996). Once learners decide that a word is worth guessing, they might follow a five-step procedure such as that of Nation and Coady (1988, pp. 104–150):

1. Determine the part of speech of the unknown word.
2. Look at the immediate context and simplify it if necessary.

3. Look at the wider context. This entails examining the clause with the unknown word and its relationship to the surrounding clauses and sentences.

4. Guess the meaning of the unknown word.

5. Check that the guess is correct.

In Step 5, the guess needs to be the same part of speech as the unknown word. Moreover, the learner should try to see if the unknown word can be analyzed into parts (*unlock* becomes *un + lock*) and to check if the meaning of the parts matches the meaning of the unknown word. Finally, the guess should be tried out in the context to see whether it makes sense, and a dictionary may be consulted to confirm the guess. In the case of a wrong or partially correct guess, it is important for learners to reanalyze how the "correct" answer is more appropriate in the context. Finally, Liu and Nation (1985) suggest practicing this strategy as a class rather than as individual work, and Williams (1986) advises that it be demonstrated on an overhead transparency or a chalkboard by circling the unknown word and drawing arrows from other words that give clues to its meaning.

PRINCIPLE 7: EXAMINE DIFFERENT TYPES OF DICTIONARIES AND TEACH STUDENTS HOW TO USE THEM

Bilingual dictionaries have been found to result in vocabulary learning (Knight, 1994; Luppescu & Day, 1993). Hulstijn, Hollander, and Greidanus (1996) showed that, compared to incidental learning, repeated exposure to words combined with marginal glosses or bilingual dictionary use leads to increased learning for advanced learners. Luppescu and Day's (1993) study on Japanese students reports that bilingual dictionaries did result in vocabulary learning, unless the unfamiliar word had numerous entries, in which case the dictionaries may have confused learners. Finally, a bilingual dictionary may be much more likely to help lower-proficiency learners in reading comprehension because their lack of vocabulary can be a significant factor in their inability to read (Knight, 1994).

Bilingualized dictionaries may have some advantages over traditional bilingual or monolingual dictionaries. Bilingualized dictionaries essentially do the job of both a bilingual and a monolingual dictionary. Whereas bilingual dictionaries usually provide just an L1 synonym, bilingualized dictionaries include L2 definitions, L2 sentence examples, as well as L1 synonyms. Bilingualized dictionaries were found to result in better comprehension of new words than either bilingual or monolingual dictionaries (Laufer & Hader, 1997). A further advantage is that they can be used by all levels of learners: Advanced students can concentrate on the English part of the entry, and beginners can use the translation. For beginners, teachers may want to examine the bilingualized *Longman-Mitsumura English-Japanese Dictionary for Young Learners* (1993), which includes Japanese translations, definitions, and examples. Currently, neither Collins COBUILD, Longman, nor Oxford (all publishers with access to large, updated computerized English language databases) has bilingualized dictionaries for intermediate and advanced learners.

Electronic dictionaries with multimedia annotations offer a further option for teachers and learners. Chun and Plass's (1996) study of American university students learning German found that unfamiliar words were most efficiently learned when both pictures and text were available for students. This was more effective than text alone or combining text and video, possibly because learners can control the length of time spent viewing the pictures. Hulstijn, Hollander, and Greidanus (1996) suggest that, because computerized entries are easier to use than traditional dictionaries, students will be more likely to use them. Teachers may want to investigate the CD-ROM dictionaries published by Collins COBUILD, Longman, and Oxford. However, unlike the dictionary in the Chun and Plass study, these CD-ROM dictionaries do not link most of their entries to a visual

image. The one exception is *The New Oxford Picture Dictionary CD-ROM* (1997), which includes 2,400 illustrated words (mainly concrete nouns) and is available in a bilingual version.

Finally, training in the use of dictionaries is essential. Unfortunately, in most classrooms, very little time is provided for training in dictionary use (Graves, 1987; Summers, 1988). In addition to learning the symbols and what information a dictionary can and cannot offer, learners may need extra practice for words with many entries. Furthermore, learners need to be taught to use all the information in an entry before making conclusions about the meaning of a word (Laufer & Hader, 1997). The learners' attention should also be directed toward the value of good sentence examples which provide collocational, grammatical, and pragmatic information about words. Finally, teachers should emphasize the importance of checking a word's original context carefully and comparing this to the entry chosen, because context determines which sense of a word is being used.

CONCLUSION

Learning vocabulary through incidental, intentional, and independent approaches requires teachers to plan a wide variety of activities and exercises. The amount of emphasis that teachers and programs decide to place on any given activity will depend on the learners' level and the educational goals of the teacher and the program. In general, it makes most sense to emphasize the direct teaching of vocabulary for learners who still need to learn the first 3,000 most common words. As learners' vocabulary expands in size and depth, extensive reading and independent strategies may be increasingly emphasized. Extensive reading and listening, translation, elaboration, fluency activities, guessing from context, and using dictionaries all have a role to play in systematically developing the learners' vocabulary knowledge.

References

Atkinson, R. C. (1972). Optimizing the learning of a second language vocabulary. *Journal of Experimental Psychology, 96*, 124–129.

Channell, J. (1988). Psycholinguistic considerations in the study of L2 vocabulary acquisition. In R. Carter & M. McCarthy (Eds.), *Vocabulary and language teaching.* London: Longman.

Chun, D., & Plass, J. (1996). Effects of multimedia annotations on vocabulary acquisition. *Modern Language Journal, 80*, 183–198.

Coady, J. (1997a). L2 vocabulary acquisition: A synthesis of the research. In J. Coady & T. Huckin (Eds.), *Second language vocabulary acquisition* (pp. 273–290). Cambridge: Cambridge University Press.

Coady, J. (1997b). L2 vocabulary acquisition through extensive reading. In J. Coady & T. Huckin (Eds.), *Second language vocabulary acquisition* (pp. 225–237). Cambridge: Cambridge University Press.

Craik, F. I. M., & Lockhart, R. S. (1972). Depth of processing and the retention of words in episodic memory. *Journal of Experimental Psychology, 104*, 268–284.

Day, R., Omura, C., & Hiramatsu, M. (1991). Incidental EFL vocabulary learning and reading. *Reading in a Foreign Language, 7*, 541–549.

Elley, W. (1989). Vocabulary acquisition from listening to stories. *Reading Research Quarterly, 24*, 174–187.

Ellis, N., & Beaton, A. (1993). Psychological determinants of foreign language vocabulary learning. *Language Learning, 43*(4), 559–617.

Fay, D., & Cutler, A. (1977). Malapropisms and the structure of the mental lexicon. *Linguist Inquiry, 8*(3), 505–520.

Graves, M. (1987). The roles of instruction in fostering vocabulary development. In M. G. McKeown & M. E. Curns (Eds.), *The nature of vocabulary acquisition* (pp. 167–184). Hillsdale, NJ: Lawrence Erlbaum.

Higa, M. (1963). Interference effects of intralist word relationships in verbal learning. *Journal of Verbal Learning and Verbal Behavior, 2*, 170–175.

Hulstijn, J., Hollander, M., & Greidanus, T. (1996). Incidental vocabulary learning by advanced foreign language students: The influence of marginal glosses, dictionary use, and reoccurrence of unknown words. *Modern Language Journal, 80*, 327–339.

Kelly, P. (1990). Guessing: No substitute for systematic learning of lexis. *System, 18*, 199–207.

Knight, S. (1994). Dictionary use while reading: The effects on comprehension and vocabulary acquisition for students of different verbal abilities. *Modern Language Journal, 78*, 285–299.

Laufer, B. (1992). How much lexis is necessary for reading comprehension? In H. Bejoint & P. Arnaud (Eds.), *Vocabulary and applied linguistics* (pp. 126–132). London: MacMillan.

Laufer, B., & Hadar, L. (1997). Assessing the effectiveness of monolingual, bilingual, and "bilingualized" dictionaries in the comprehension and production of new words. *Modern Language Journal, 81*, 189–196.

Lewis, M. (1993). *The lexical approach*. Hove, UK: Language Teaching Publications.

Lewis, M. (1997). L2 vocabulary acquisition through extensive reading. In J. Coady & T. Huckin (Eds.), *Second language vocabulary acquisition* (pp. 255–270). Cambridge: Cambridge University Press.

Liu, N., & Nation, I. S. P. (1985). Factors affecting guessing vocabulary in context. *RELC Journal, 16*(1), 33–42.

Longman-Mitsumura English-Japanese Dictionary for Young Learners. (1993). Harlow, UK: Longman and Mitsura Book Publishing Company.

Luppescu, S., & Day, R. (1993). Reading, dictionaries, and vocabulary learning. *Language Learning, 43*, 263–287.

McCarthy, M., & O'Dell, F. (1994). *English vocabulary in use*. Cambridge: Cambridge University Press.

Meara, P. (1992). *EFL vocabulary tests*. Centre for Applied Language Studies University College Swansea. (ERIC Document Reproduction Service No. ED 362 046).

Meara, P. (1996). The dimensions of lexical competence. In G. Brown, K. Malmkjaer, & J. Williams (Eds.), *Performance and competence in second language acquisition* (pp. 35–53). Cambridge: Cambridge University Press.

Mikulecky, B. S., & Jeffries, L. (1996). *More reading power*. Reading, MA: Addison-Wesley.

Nagy, W. E., Herman, P., & Anderson, R. C. (1985). Learning words from context. *Reading Research Quarterly, 20*, 233–253.

Nation, I. S. P. (1990). *Teaching and learning vocabulary*. New York: Newbury House.

Nation, I. S. P. (Ed.). (1994). *New ways in teaching vocabulary*. Alexandria, VA: TESOL.

Nation, I. S. P., & Coady, J. (1988). Vocabulary and reading. In R. Carter & M. McCarthy (Eds.), *Vocabulary and language teaching.* London: Longman.

Nattinger, J., & DeCarrico, J. (1992). *Lexical phrases and language teaching*. Oxford: Oxford University Press.

The New Oxford Picture Dictionary CD-ROM. (1997). Oxford: Oxford University Press.

Paribakht, T., & Wesche, M. (1996). Enhancing vocabulary acquisition through reading: A hierarchy of text-related exercise types. *Canadian Modern Language Review, 52*, 155–178.

Pilgreen, J., & Krashen, S. (1993). Sustained silent reading with English as a second language high school students: Impact on reading comprehension, reading frequency, and reading enjoyment. *School Library Media Quarterly, 22*, 21–23.

Pimsleur, P. (1967). A memory schedule. *Modern Language Journal, 51*, 73–75.

Prince, P. (1996). Second language vocabulary learning: The role of context versus translations as a function of proficiency. *Modern Language Journal, 80*, 478–493.

Read, J. (1988). Measuring the vocabulary knowledge of second language learners. *RELC Journal, 19*(2), 12–25.

Redman, S., & Ellis, R. (1990). *A way with words book 2*. Cambridge: Cambridge University Press.

Richards, J. C. (1976). The role of vocabulary teaching. *TESOL Quarterly, 10*(1), 77–89.

Schmitt, N., & Meara, P. (1997). Researching vocabulary through a word knowledge framework. *Studies in Second Language Acquisition, 19*, 17–36.

Schmitt, N., & Schmitt, D. (1995). Vocabulary notebooks: Theoretical underpinnings and practical suggestions. *ELT Journal, 49*(2), 133–143.

Seibert, L. C. (1927). An experiment in learning French vocabulary. *Journal of Educational Psychology, 18*, 294–309.

Summers, D. (1988). The role of dictionaries in language learning. In R. Carter & M. McCarthy (Eds.), *Vocabulary and language teaching* (pp. 111–125). London: Longman.

Tinkham, T. (1993). The effect of semantic clustering on the learning of second language vocabulary. *System, 21*(3), 371–380.

West, M. (1953). *A general service list of English words*. London: Longman.

Williams, R. (1986). Teaching vocabulary recognition strategies in ESP reading. *ESP Journal, 4*, 121–131.

Woodinsky, M., & Nation, P. (1988). Learning from graded readers. *Reading in a Foreign Language, 5*(1), 155–161.

Xue, G., & Nation, I. S. P. (1984). A university word list. *Language Learning and Communication, 3*(2), 215–229.

Zimmerman, C. B. (1997). Do reading and interactive vocabulary instruction make a difference?: An empirical study. *TESOL Quarterly, 31*, 121–140.

Best Practice in Vocabulary Teaching and Learning

Paul Nation

INTRODUCTION

Research on second language acquisition can be interpreted to show that a well-balanced language course should contain four major strands: meaning-focused input, meaning-focused output, fluency development and language-focused instruction. The inclusion of a language-focused instruction strand is not a reaction to communicative approaches but is the result of research findings that courses that contain such a strand are likely to achieve better results than courses that do not contain such a strand (Long, 1988; Ellis, 1990). For most second language learners, language-focused vocabulary instruction is an *essential* part of a language course.

The aim of this article is to show how the vocabulary component of a language course fits into these four strands. The assumption is that vocabulary growth is such an important part of language acquisition that it deserves to be planned for, deliberately controlled and monitored. There is a growing body of theory and research findings that can guide us in doing this.

VOCABULARY AND MEANING-FOCUSED INPUT

Reading has long been seen as a major source of vocabulary growth. Research indicates that, for several reasons, there is a fragility to this kind of learning. First, research with native speakers of English shows that the amount of vocabulary learning that occurs during the reading of a text is rather small (Nagy, Herman, & Anderson, 1985). It is necessary to use sensitive tests of vocabulary knowledge to show any learning at all. However, it is likely to be cumulative if there are repeated opportunities to meet the partially learned vocabulary

again. This suggests that there will be a close relationship between vocabulary growth and the amount and variety of meaning-focused input.

Frequency counts show us that there is a very rapid drop-off in frequency of occurrence of vocabulary after the most frequent 2,000 to 3,000 high-frequency words of the language. For example, in a diverse 1,000,000 running word corpus, words outside the most frequent 6,000 occur less than eight times. This drop-off is even more noted in texts belonging to the same genre (Sutarsyah, Nation, & Kennedy, 1994). One million running words is about 3,000 pages of text or the equivalent number of pages of ten to fifteen novels. Clearly, beyond the most frequent words of the language, considerable meaning-focused input is needed for vocabulary growth to continue at a reasonable pace.

The second reason why vocabulary learning through meaning-focused input is fragile is that it depends heavily on the quality of the learners' control of the reading skill. Chall (1987) argues that for native speakers there is little vocabulary growth through reading while learners gain control of the skill of reading. For native speakers of English, this takes several years. Once this skill is developed, reading can then become a major means of vocabulary growth. Nonnative speakers are in a different situation, but with similar results. Adult learners of another language may already be fluent readers of their first language. One of the major barriers to reading in the second language is vocabulary size.

For this reason, Michael West and others saw the importance of providing series of graded readers with careful vocabulary control. These allow second language learners to draw on the reading skill developed in their first language to expand their vocabulary in the second language. These are an important resource for learners and a vital part of a language course. Their effective use for vocabulary growth, however, depends on learners' reading skill.

The third reason why vocabulary learning through meaning-focused input is fragile is that the type of reading that is done will strongly influence vocabulary learning. If learners read in familiar areas where they bring a lot of relevant background knowledge to their reading, they will easily cope with unknown words in context, but they will probably not learn them. If they read in unfamiliar areas, there is greater chance of learning new vocabulary because they have to pay close attention to the language of the text to get the meaning.

Research in another area of meaning-focused input supports the value of giving attention to the language as a system and not just as messages. Elley's (1989) studies of vocabulary learning through listening to stories show that if the teacher briefly interrupts the story to comment on the meaning of a word, or to put it on the chalkboard, the learning of those items increases significantly. This shows that deliberately drawing attention to language items as a part of the language system (language-focused instruction) makes learning more certain. Relying on meaning-focused input alone is leaving too much to chance.

This examination of the fragility of vocabulary learning through meaning-focused input is not intended to show that such learning is not worthwhile. Vocabulary learning through reading and listening is an essential strand of a language course. Best practice in vocabulary teaching and learning should aim to reduce this fragility by providing large quantities of suitably graded input, by providing it across a range of genres and topics, and by providing language-focused activities to support it. This will ensure that the learning condition of noticing will occur.

Vocabulary and Meaning-Focused Output

It may seem a little strange to see meaning-focused speaking and writing as ways of expanding learners' vocabulary, but the most exciting findings of recent research on vocabulary learning have revealed how spoken production of vocabulary items helps learning and how

teachers and course designers can influence this spoken production. The research is reported in Newton (1995), Joe (1995) and Joe, Nation, and Newton (1996). The main findings of this research into spoken communicative activities are as follows:

- The written input to a communicative task has a major effect on what vocabulary is used and negotiated during the task. Newton (1995) found that all of the vocabulary negotiated in the ranking and problem-solving tasks he investigated was in the written task sheet handed out to the learners. Joe (1995) found that in a retelling task, vocabulary from the written text was produced during the retelling even when the written text could not be consulted and some of the vocabulary items were previously unknown.
- Negotiation of the meaning of unknown vocabulary meant that words had a greater chance of being learned. However, because much more previously unknown vocabulary was used and not negotiated, quantitatively more vocabulary was learned through being used productively or receptively.
- The quality of learning depends on the quality of use of the previously unknown vocabulary during the communicative task (Joe, 1995). The more the vocabulary is observed or used in contexts which differ from its occurrence in the written input, the better it is learned.
- Learners are able to provide useful information to each other on most of the vocabulary in a typical communicative task; that is, if someone in a group does not know a particular word, there is likely to be someone else in the group who knows something useful about it and who can communicate this information effectively.
- Learners who actively negotiate the meaning of unknown words do not seem to learn more than learners who observe the negotiation.
- Only a small amount of the negotiation in a communicative task (about 6% in Newton's study) is negotiation of word meaning. The other kinds of negotiation include negotiation of procedure, negotiation of comprehension, negotiation of mishearing, and so on.
- Research on learning from negotiation needs to be careful about distinguishing what is negotiated.

The significance of these findings for vocabulary learning is that by carefully designing and monitoring the use of the handout sheets for spoken tasks, teachers can have a major influence on determining what vocabulary could be learned from such tasks, and how well it is learned.

There is no research on how tasks involving written production can result in vocabulary learning. It is not difficult to imagine that writing requiring the synthesis of information from several related sources could provide very favorable conditions for learning from input and strengthening this learning through generative use in written output.

Developing Fluency with Vocabulary

Here, "fluency" means making the best use of what you already know, and fluency development tasks have the characteristics of involving no new language items, dealing with largely familiar content and discourse types, including some kinds of preparation or repetition so that speed and smoothness of delivery can improve, and involving some kind of encouragement to perform at a faster than normal level of use. Fluency tasks are typically meaning-focused tasks.

Surprisingly, given its effect on vocabulary knowledge, fluency development is still largely an unexplored area.

There are some vocabulary items that need to be learned to a very high degree of fluency as quickly as possible. These include numbers, polite formulas, items for controlling language use (for example, to ask someone to repeat, speak more slowly and so on), times, and periods of time and quantities. In addition to this, it is important that all high-frequency vocabulary be learned to a reasonable degree of fluency so that it can be readily accessed when it is needed.

The following learning conditions favor the development of fluency:

- The demands of the task are largely within the experience of the learners; that is, the learners are working with known language items, familiar ideas, and familiar tasks. Fluency activities should not involve unfamiliar vocabulary.
- The learners' focus is on the message.
- The learners are encouraged to reach a higher than usual level of performance, through the use of repetition, time pressure, and planning and preparation.

Repetition and focus on the message may work against each other – the more something is repeated, the less likely it will continue to be seen as a message-focused activity. The teaching methodology solution to this is to balance the ease provided by the repetition against a challenge provided by new but similar material, reducing time, a new audience, and increasing complexity. Initially, activities such as number dictation, prepared talks, interviews, and questionnaires would be most suitable. Later activities could include re-telling tasks.

Vocabulary and Language-Focused Instruction

Language–focused instruction occurs when learners direct their attention to language items not for producing or comprehending a particular message, but for gaining knowledge about the item as a part of the language system. Language-focused instruction thus includes focusing on the pronunciation and spelling of words; deliberately learning the meanings of a word; memorizing collocations, phrases and sentences containing a word; and being corrected for incorrect use of a word.

Negotiation of vocabulary is also a kind of language-focused instruction if it involves discussing the word's spelling or pronunciation, or giving an explanation of its meaning.

Language-focused instruction can affect implicit knowledge of a language in several ways. If knowing the word is not dependent on a developmental sequence of knowledge, then language-focused instruction on each word can add directly to both implicit knowledge and explicit knowledge. Some concepts – for example, family relationships – are probably acquired developmentally, and language-focused instruction may have no effect if the learners are not at an appropriate stage of conceptual development. It is not known what other learning conditions apply for language-focused instruction on vocabulary to directly affect implicit knowledge, but it seems likely that only some learning of vocabulary items that are not affected by a developmental sequence directly enters implicit knowledge.

A second effect of language-focused instruction is that it can raise learners' consciousness or awareness of particular items so that they are then more readily noticed when they occur in meaning-focused input. The causal chain is (1) language-focused instruction, (2) explicit knowledge about a word, (3) increased awareness of the word, (4) noticing of the word in meaning-focused input, and (5) implicit knowledge of the word. The quality

of the language-focused instruction will determine how readily a word is noticed and what aspects of the word are noticed.

A third effect of language-focused instruction is similarly indirect: (1) language-focused instruction, (2) explicit knowledge, (3) output constructed from the explicit knowledge (that is, the word is used in a consciously constructed sentence), (4) the output acting as meaning-focused input to the same learner, and (5) implicit knowledge of the word.

What kinds of language-focused vocabulary instruction are likely to be of benefit? The following list is ranked in order of importance. Each suggestion is matched with its likely effect on implicit knowledge.

GUESSING UNKNOWN WORDS FROM CONTEXT

Although this may seem to be a meaning-focused activity, at least in the early stages of the development of the guessing skill, it involves learners consciously focusing on unknown words, interrupting their normal reading, and systematically drawing on the available clues to work out the unknown word's meaning.

Guessing from context focuses on the particular reference of a word as determined by the context rather than on its underlying meaning. It is likely that this knowledge will directly enter implicit memory as it will be less complicated than the concept of the word. Guessing may also serve to raise consciousness of the word.

There are various effects of guessing procedures. Their main effect should be to raise learners' confidence in guessing from context, to make them sensitive to the range of clues available, and to help them avoid strategies – such as focusing too quickly on the form of the word – that will reduce their chances of guessing accurately.

LEARNING THE MEANINGS OF UNKNOWN WORDS

There is an assumption in much that is written about vocabulary learning that all vocabulary learning should be in context. This assumption is not supported by research and by what successful learners do. Considerable research shows that

- Explicit, decontextualized study of vocabulary is an effective way of rapidly increasing learners' vocabulary size.
- The learning achieved in this way can last for a very long time.
- This knowledge can be made available for meaning-focused use of the language.
- There are ways that considerably increase the efficiency of language-focused learning and learners benefit from being able to make use of these. They include the use of mnemonic techniques, using vocabulary cards which encourage retrieval, the spacing and organizing of learning, and the deliberate avoidance of interference among items.

The deliberate learning of vocabulary may contribute directly to implicit knowledge if the words learned are not complicated and if the learning is meaningful. At the very least, the results of deliberate learning will be available for language-focused use, which may then indirectly contribute to implicit knowledge through production or through making meaning-focused input meaningful. There is a lack of research on the effect of deliberate vocabulary learning on meaning-focused use.

STUDY OF WORD PARTS AND MNEMONIC DEVICES

The majority of words in English come from French, Latin, or Greek and the majority of these have word parts, particularly prefixes and suffixes, which occur in many words. Knowledge of these word parts can be used to improve the learning of many words through

relating unknown word forms and meanings to known word parts. This is similar to the effect of mnemonic devices on vocabulary learning, the best researched of which is the keyword technique.

The effect of such learning is probably to add to explicit knowledge. This will contribute to implicit knowledge receptively because it is a very strong form of consciousness-raising, and productively through the deliberate production of meaning-focused output.

A well thought-out vocabulary component of a course would be largely indistinguishable from the listening, speaking, reading, and writing parts of the language program. The main differences would lie in the language-focused learning and in the deliberate planning and manipulation of the written input to listening, speaking, reading, and writing activities to provide optimal conditions for vocabulary growth.

References

Beebe, L. M. (Ed.). (1988). *Issues in second language acquisition.* New York: Newbury House.

Chall, J. S. (1987). Two vocabularies for reading: Recognition and meaning. In M. G. McKeown & M. E. Curtis, *The nature of vocabulary acquisition* (pp. 7–17). Hillsdale, NJ; Lawrence Erlbaum.

Elley, W. R. (1989). Vocabulary acquisition from listening to stories. *Reading Research Quarterly, 24*(2), 174–187.

Ellis, R. (1990). *Instructed second language acquisition.* London: Blackwell.

Joe, A. (1995). Text-based tasks and incidental vocabulary learning. *Second Language Research, 11*(2), 149–158.

Joe, A., Nation, P., & Newton, J. (1996). Speaking activities and vocabulary learning. *English Teaching Forum, 34*(1), 2–7.

Long, M. (1988). Instructed interlanguage development. In L. M. Beebe (Ed.), *Issues in second language development.* New York: Newbury House.

McKeown, M. G., & Curtis, M. E. (Eds.) (1987). *The nature of vocabulary acquisition.* Hillsdale, NJ: Lawrence Erlbaum.

Nagy, W. E., Herman, P., & Anderson, R. C. (1985). Learning words from context. *Reading Research Quarterly, 20*, 233–253.

Newton, J. (1995). Text-based interaction and incidental vocabulary learning: A case study. *Second Language Research, 11*(2), 159–177.

Sutarsyah, C., Nation, P., & Kennedy, G. (1994). How useful is EAP vocabulary for ESP? A corpus-based study. *RELC Journal, 25*(2), 34–50.